

REMARKS

Claims 1-12, 14-29 and 31-34 were pending in the Application at the time of examination. Claims 20-29 and 31-34 have been canceled without prejudice. Claim 16 has been amended. Support for the amendment of Claim 16 is found in the specification at least at page 7, lines 17-23.

Rejection of Claim 20 is moot.

Claim 20 has been cancelled without prejudice. Therefore, rejection of Claim 20 under 35 U.S.C. 112, second paragraph is moot.

Claims 1-10, 12, and 14-19 are novel over Sun et al (U.S. 5,262,353).

The Examiner states:

... Sun et al. (Fig 6, 9) discloses a structure comprising a first (16) and a second signal line (16) above a substrate (12) with a **first shield line (20; portion in first trench region)** positioned between but separated from said first and second line in an unused substrate surface area, **said shielding line electrically floating** (via insulation 18, 22), ... (Office Action, page 3, emphasis added).

The Examiner's statement is respectfully traversed. With reference to FIG. 4 and thus FIG. 6, Sun et al. teaches:

A second conductive layer known as a shielding conductive layer 20 overlies the second dielectric layer and lies at least partially within the recessed regions. In many cases, the conductive layer 20 will completely fill the recessed regions and therefore reduce topographical problems. Conductive layer 20 is made of polysilicon, metals, salicides, substrate material, epitaxial formations or the like. **Conductive layer 20 is electrically connected to a fixed voltage supply, such as a power supply line (not illustrated) or a ground line (not illustrated).** Conductive layer 20, by filling or covering the recessed regions and **by being biased at**

a constant voltage, effectively reduces capacitive coupling between adjacent electrically isolated conductive regions of conductive layer 16. (col. 3, lines 54-68, emphasis added).

Thus, Sun et al. teaches shielding conductive layer 20 is "electrically connected to a fixed voltage supply, such as a power supply line ... or a ground line". Applicants respectfully submit that a shielding conductor electrically connected to a fixed voltage supply is the opposite of and mutually exclusive with an electrically "floating" shielding conductor. An electrically floating shielding conductor is electrically isolated and not "biased at a constant voltage" by being electrically coupled with a fixed voltage supply.

This conclusion is further illustrated with respect to the cited FIG. 9. Sun et al. teaches:

... FIG. 9 illustrates a first shielding structure which has ... a shielding conductive layer 20. The first shielding structure is formed by the process of FIGS. 1-7. ...

... A second shielded structure is formed overlying the first shielding structure and has ... a shielding conductive layer 20a. The second shielding structure is formed by the process of FIGS. 1-7. ...

... Conductive layer 20 is electrically connected to a portion of conductive layer 20a that is not used for shielding but is connected to a ground potential (GND). **A portion of the conductive layer 20a that is used for shielding is electrically connected to a power supply potential (Vcc or a voltage that usually is a fixed value that ranges from +2.5 V to 5.0 V although negative voltages and large voltages are possible for some power supply applications and requirements). The task of biasing shielding layers that shield other conductive layers is usually split in some predetermined manner between all the various power supplies and GNDs in the system.** (Portions of col. 4, line 65 to col. 5, line 49, emphasis added).

Thus, Sun et al. teaches again that the portion of the conductive layer 20a that is used for shielding is

"electrically connected to a power supply potential". Applicants respectfully submit that a shielding conductor electrically connected to a power supply potential is the opposite of and mutually exclusive with an electrically "floating" shielding conductor. An electrically floating conductor is electrically isolated and not electrically coupled with a power supply potential.

Consequently, Applicants submit that Sun et al. does not disclose, teach, or suggest, and in fact teaches away from, a structure comprising:

a first signal line;
a second signal line; and
a first shield line positioned between but separated from said first signal line and said second signal line, said first shield line being electrically floating,

as recited in Claim 1, emphasis added.

Accordingly, Claim 1 is novel over Sun et al. Claims 2-9, which depend directly or indirectly from Claim 1, are allowable for at least the same reasons as Claim 1.

Independent Claim 10 is novel over Sun et al. for reasons similar to Claim 1. Claims 12, 14, 15, and 17-19, which depend directly or indirectly, from Claim 10, are allowable for at least the same reasons as Claim 10. Independent Claim 16 is also novel over Sun et al. for reasons similar to Claim 1.

For the above reasons, Applicants respectfully request reconsideration and withdrawal of this rejection.

Claim 11 is patentable over Sun et al (U.S. 5,262,353).

As noted above, Claim 10 is novel over Sun et al. Therefore, Claim 11, which depends directly from Claim 10, is novel over Sun et al for at least the same reasons as Claim 10. The Examiner's statement on page 4 of the Office action about the obviousness of "design choice" and "routine experimentation" relative to the distance between the first and

second signal line does not cure the deficiency in Sun et al. noted above.

Consequently, Applicants respectfully submit that Claim 11 is allowable over Sun et al. in view of the Examiner's statement regarding obviousness.

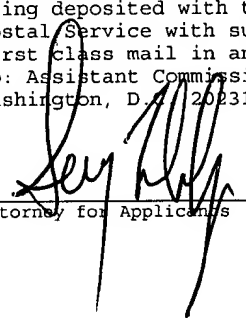
For the above reasons, Applicants respectfully request reconsideration and withdrawal of this rejection.

CONCLUSION

Claims 1-12 and 14-19 are pending in the application. For the foregoing reasons, Applicants respectfully request allowance of all pending claims. If the Examiner has any questions relating to the above, the Examiner is respectfully requested to telephone the undersigned Attorney for Applicants.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on January 31, 2003.

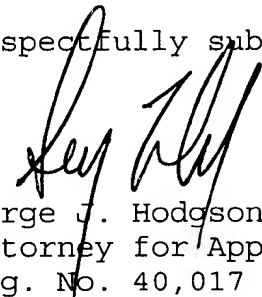


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Date of Signature

Respectfully submitted,


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